



**Uniform Fire Code
Administrative Ruling / Interpretation**



Code Section: UFC 1006.2.2 and 1006.2.7

Code Edition: 1997

Date: September 12, 2000

Statement of Need:

Two changes in commercial food preparation techniques have had a significant impact on fire protection in recent years:

- **Vegetable oils burn at a higher temperature (685 plus deg. F) than animal fats (550-600 deg. F).**
- **Energy efficient cooking appliances are now used extensively in restaurants. Highly insulated fryers keep cooking oils and metal appliances hot longer.**

These two changes have created conditions that create fires that are more difficult to extinguish and prone to re-ignite. There are documented fires in cooking equipment that were not controlled by the existing pre U.L. 300 extinguishing systems. Extinguishment was affected only after application of 1-3/4" hand lines.

On November 21, 1994, Underwriters Laboratories adopted a new standard, *UL 300-Fire Testing of Fire Extinguishing Systems for Protection of Restaurant Cooking Areas*, which test for these specific hazards. The U.L. 300 standard provides for much greater cooling of the cooking surfaces (requires up to five times additional agent for wet chemical systems). Note: There are currently no dry chemical agent extinguishing systems that meet the U.L. 300 standard due to the susceptibility for re-ignition of the fire.

Ruling/Interpretation:

UFC 1006.2.2, "Protection of Commercial Cooking Operations - Type of system":

- U.L. 300 compliant systems shall be required for all new installations of fire extinguishing systems that protect cooking equipment that have the potential to release grease laden vapors.
- Existing extinguishing systems protecting cooking equipment that do not comply with U.L. 300 shall be brought into compliance with that standard within 6 months of written notification by Fire Prevention personnel.

UFC 1006.2.7, "Protection of Commercial Cooking Operations – Portable fire extinguishers":

New and existing cooking appliances using combustible cooking media (vegetable or animal oils and fats) shall have a **"K-type"** portable fire extinguisher installed within 30 feet in lieu of a 40-B:C dry chemical-type in accordance with NFPA 10 – 1998, "Standard for Portable Fire Extinguishers", Section 3-7, "Fire Extinguisher Size and Placement for Class K Fires".

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